

METHODS AND APPARATUS FOR SEALING A LOAD PLACED ON A PALLET

ABSTRACT OF THE DISCLOSURE

A system for sealing a load with film, where the load is placed on a pallet, includes a frame and a vertically moveable platform on which the pallet is received. A clamp is mounted to the frame and is configured to engage the load independently of the pallet when the pallet is received on the platform. A rack is mounted to the frame so as to be vertically movable, and a pair of cross members are mounted to the rack so as to be horizontally movable. An engagement subsystem configured to engage sides of the film and a sealing subsystem configured to seal the film are mounted to the cross members. In operation, when the pallet is placed on the platform, the sides of the film, which in the form of a sleeve where the sides define an inner space when separated, are engaged with the engagement subsystem when the rack is in the upper position. Thereafter, the cross members move outwardly to separate the sides of film and to define the inner space. The rack is then moved to the lower position, thereby enveloping the load within the sleeve of the film. The load is then secured with the clamp and separated from the pallet. The cross members are then moved inwardly so that the sides of the film are brought together, which are then sealed with the sealing subsystem, for example, with heat. The sides of the film are disengaged, and the cross members are moved outwardly. The load may then be replaced on the pallet with the seal positioned therebetween. The film may then be sealed and cut at the top of the load, thereby forming a bag around the load.